INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/38470

			101/0505/501/	
A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) : C12N 13/00, 1/00, 1/34				
US CL : 435/173.6, 285.2, 288.4, 305.2				
According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols)				
U.S. : 435/173.6, 285.2, 288.4, 305.2				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.
X JP	JP 40-2131569 A (HITACHI LTD) 21 May, 1990, see abstract.			1-3,8-13,15-
				20,24,25,30,36-39
Y		4 6 14 21 22 26 20		
,	A 110 6 006 114 A (MANT) 00 Nove 1 1004			4-6,14,21-23,26-29
A US	US 5,296,114 A (MANZ) 22 March 1994, see abstract.			1-42
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Further documents are listed in the continuation of Box C.			family annex.	
Special categories of cited documents:				ernational filing date or priority
"A" document defining the general state of the art which is not considered to be		date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
of particular rel	levance	"X" document of particular relevance; the claimed invention cannot be		
"E" earlier applicati	ion or patent published on or after the international filing date			ered to involve an inventive step
"L" document which may throw doubts on priority claim(s) or which is cited to		when the doct	ument is taken alone	
establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means		"Y" document of particular relevance;		claimed invention cannot be
		considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art		
P document published prior to the international filing date but later than the "&" document member of the same priority date claimed				. ianuly
Date of the actual completion of the international search Date of mailing of the international search report				
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13 April 2004 (13			HER LUL	J* †
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Form PCT/ISA/210 (second sheet) (July 1998)